

CLAIMS

We claim:

1. A method of serving a plurality of mobile stations concurrently under a common MIN, the method comprising allowing MIN-based terminations to only one of the mobile stations at a time.

2. A method comprising:
maintaining a subscriber profile that associates multiple subscriber stations with a common subscriber ID, wherein only a first subscriber station of the multiple subscriber stations is arranged to respond to a predetermined type of termination signal;
using the subscriber profile to authorize an origination from any of the subscriber stations; and
in response to a request to terminate a predetermined type of communication to the subscriber ID, broadcasting the predetermined type of termination signal keyed to the subscriber ID, whereby only the first subscriber station will respond to the termination signal.

3. The method of claim 1, wherein the predetermined type of communication comprises a call directed to the subscriber ID.

4. The method of claim 2, wherein the predetermined type of termination signal comprises a paging channel message.

5. The method of claim 4, wherein the predetermined type of termination signal comprises a general page message.

6. The method of claim 2, wherein broadcasting the predetermined type of termination signal keyed to the subscriber ID comprises broadcasting a termination signal that is the predetermined type of termination signal and that carries the subscriber ID as a parameter.

7. The method of claim 2, wherein the predetermined type of termination signal includes at least one parameter indicating that it is the predetermined type of termination signal.

8. The method of claim 2, further comprising:
programming all of the subscriber stations except the first subscriber station to ignore the predetermined type of termination signal.

9. The method of claim 2, further comprising programming only the first subscriber station to respond to the predetermined type of termination signal broadcast to the subscriber ID.

10. The method of claim 2, wherein the subscriber profile comprises a table having a number of records each corresponding to a respective one of the subscriber stations.

11. The method of claim 2, wherein the first subscriber station is a mobile station, and wherein the method further comprises:

receiving a registration message indicating that the first subscriber station is located in a particular location, wherein broadcasting the predetermined type of termination signal comprises broadcasting the predetermined type of termination signal into the particular location.

5 12. The method of claim 11, further comprising:

in response to the registration message, indicating in the subscriber profile that the first subscriber station is physically located in the particular location; and

using the subscriber profile to determine that the predetermined type of termination signal should be broadcast into the particular location.

10 13. The method of claim 2, wherein each subscriber station of the plurality of subscriber stations is a mobile station having a respective electronic serial number (ESN), wherein the common subscriber ID comprises a mobile identification number (MIN), and wherein:

15 maintaining a subscriber profile that associates multiple subscriber stations with the common subscriber ID comprises maintaining a subscriber profile that associates the common MIN with the ESNs of the mobile stations.

20 14. The method of claim 13, wherein broadcasting the predetermined type of termination signal comprises sending the predetermined type of termination signal over an air interface.

15. The method of claim 2, wherein the subscriber ID comprises a telephone number and the predetermined type of communication comprises a telephone call, the method further comprising receiving the request to terminate the predetermined type of communication to the subscriber ID.

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16. The method of claim 2, wherein each subscriber station has a respective station ID, wherein the subscriber profile associates the subscriber ID with the station IDs of the multiple subscriber stations, and wherein using the subscriber profile to authorize an origination from any of the subscriber stations comprises:

10 in response to an origination request that identifies the subscriber ID and a particular station ID, determining that the subscriber profile associates the subscriber ID with the particular station ID.

15 17. A method of facilitating operation of multiple subscriber terminals under a single subscriber account number, wherein each subscriber terminal has a respective unique serial number, the method comprising:

maintaining a profile authorizing the multiple subscriber terminals, wherein only one of the authorized subscriber terminals is programmed to respond to a predetermined type of communication from a serving system;

20 responding to originations from any of the subscriber terminals, wherein an origination carries a unique combination of subscriber account number and serial number and thereby distinguishes the originating subscriber terminal; and

allowing a predetermined type of termination to be made only to the one authorized subscriber terminal that is programmed to respond to the predetermined type of communication from the serving system.

5 18. In a communication system of the type having a serving system for serving a plurality of subscriber stations, wherein each subscriber station is associated with a respective station ID and a respective subscriber ID, and wherein (i) when a given subscriber station seeks to originate a communication, the given subscriber station transmits its associated station ID and subscriber ID to the serving system, and the serving system uses that station ID and subscriber ID cooperatively to authenticate the given subscriber station, and (ii) when the serving system seeks to terminate a call to the given subscriber station, the serving system broadcasts a termination message keyed to the subscriber ID of the given subscriber station, and the given subscriber station receives the termination message,

10 a method of facilitating operation of multiple subscriber stations under a common subscriber ID, the method comprising:

15 maintaining a subscriber profile for the given subscriber ID, the subscriber profile associating a plurality of station IDs with the given subscriber ID, wherein a first station ID of the plurality of station IDs is associated with a first subscriber station that is responsive to a terminations message keyed to a subscriber ID, but wherein each other
20 station ID of the plurality of station IDs is associated with a respective subscriber station that is not responsive to such a termination message,

whereby, when the serving system seeks to terminate a call to the given subscriber ID, the serving system broadcasts a termination message keyed to the given subscriber ID, and the first subscriber station responds to the termination message, and

whereby, when any particular subscriber station associated with one of the station IDs of the plurality of station IDs seeks to originate a communication, the particular subscriber station transmits its station ID and subscriber ID to the serving system, and the serving system uses that station ID and subscriber ID cooperatively to authenticate the particular subscriber station with reference to the subscriber profile.

19. A method of facilitating operation of multiple mobile stations concurrently under a common MIN, the method comprising dynamically restricting registration of the mobile stations such that the common MIN is associated with at most one registered mobile station that is arranged to respond to a MIN-based termination message.